

Receiving Report

Date: 16-12-12

Batch No: B60305

Supplier: EB peerless

Dart P/O: 34548

Packing Slip: Yes No
 Invoice: Yes No
 Receipt: Cash Cr
 New Supplier Yes No

Release Note Attached: Yes No N/A
 Waybill Attached: Yes No
 Shipment Complete: Yes No N/A
 QC18 Inspection _____
 Work Order _____

Discrepancies

Part Number	Description	Quantity Ordered	Quantity Rec'd	Quantity Short	Quantity Inspected	Quantity Rejected	Comment / NCR Number

Initials of Receiver

QC12

SP

Production/Admin:

Date _____

Location _____

Received/Costing _____

Initial _____



Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
Tel: 613 632 9577
Fax: 613 632 1053

PURCHASE ORDER

Purchase Order ID PO34548

Purchase Order Date 12/6/2016

PO Print Date 12/7/2016

Page Number 1 of 2

Order From : VC-ROY001
RBC ROYAL BANK - VISA
PAYMENT CENTRE, PO BOX 4016, STAT. A
TORONTO, ON M5W 1X6
CA

Ship To : DART AEROSPACE LTD
1270 ABERDEEN
HAWKESBURY, ON K6A 1K7
CANADA

E-MAILED

Contact Name	Buyer	Chantal Lavoie
Vendor Phone	Customer POID	
Ship To Contact	Customer Tax #	10127-2607
Ship To Phone	Terms	COD
Ship Via:	Currency	CAD
Ship Acct:	FOB	Destination-Collect

Line Nbr	Reference Vendor Part Number	Description/ Mfg ID	Req Date/ Taxable	CD	Req Qty/ Unit of Measure	PO Unit Price	Extended Price
Line Comments							
Delivery Comments							
1	71400-40	HENKEL 1200S ALODINE IDH 593964	12/15/2016	Yes	1.00 Each	\$2,980.00	\$2,980.00
		1200S-27KG	12/15/2016			SP/6-12-12.	
						Line Total:	\$2,980.00
2	71400-40	592413-450GM LOCTITE REAGENT 2	1/5/2017	Yes	1.00 Each	\$290.00	\$290.00
			1/5/2017			SP/6-12-12.	
						Line Total:	\$290.00
3	71400-40	104-TITR-SOL-1L HENKEL ST TITRATING SOLUTION 104	1/5/2017	Yes	1.00 Each	\$45.00	\$45.00
			1/5/2017			SP/6-12-12.	

PO Instructions: E B PEERLESS

Note:



Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
Tel: 613 632 9577
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1270 ABERDEEN
HAWKESBURY, ON K6A 1K7
CANADA

Contact Name

Buyer Chantal Lavoie

Vendor Phone

Customer POID

Ship To Contact

Customer Tax # 10127-2607

Ship To Phone

Terms COD

Ship Via:

Currency CAD

Ship Acct:

FOB

Destination-Collect

Deliver To: GARY

Line Total:

\$45.00

PO Total:

\$3,315.00

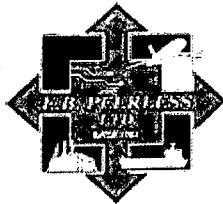
PO Instructions: E B PEERLESS

Note: Terms & Condition of Purchasing(Suppliers) and Procurement Quality Clauses are an integral part of our AS9100 requirements. To learn in detail, please visit www.dartaerospace.com for further explanation.

Change Nbr: 2

Change Date: 12/7/2016

PACKING LIST



A KRAYDEN Company

SOLD TO:
COD BY CHEQUE

ORDER DATE SHIP DATE CUSTOMER PO

12/06/16

12/07/16

PO34548

VANCOUVER OFFICE

TORONTO OFFICE

CALGARY WAREHOUSE

Unit 130 6651 Elmbridge Way
Richmond, BC V7C 5C2
Phone: (604) 279-9907
Fax: (604) 279-9914
Toll Free: 1-800-663-3271Unit 12 & 13 - 2430 Lucknow Dr.
Mississauga, Ontario L5S 1V3
Toll Free: 1-800-663-32714542 - 14TH Street NE
Calgary, AB, T2E 6T7
Toll Free: 1-800-663-3271

SHIP TO:

DART AEROSPACE
1270 ABERDEEN STREET
ATTN TO: GARY
HAWKESBURY, ON
K6A 1K7AS9120/ISO9001
VANCOUVER
TORONTO

CUSTOMER	OUR REF.#	COUNT	ORDERED BY	REV	TERMS
1CHEQTO	T26098	0	CHANTAL	Y	DUE ON RECEIPT

CUSTOMER GST #	P.S.T. LIC #	SHIPPED VIA
-----	-----	PUROLATOR 7684382

SHIPPING CHARGES: PREPAID PPD & CHARGED COLLECT

ORDER QTY	UOM	SHIP	B/O	STOCK CODE	DESCRIPTION	UNIT PRICE	PER	EXT.
1	1	EA	1	✓ 0	1200S-27KG HENKEL 1200S ALODINE POWDER 5 GAL., IDH NO.593964			

UN 1463, CHROMIUM TRIOXIDE, ANHYDROUS MIXTURE
(CHROMIC ACID), CLASS 5.1(6.1, 8), PG II
MFG.CERT. OF CONFORMANCE ATTACHED.
BATCH: *PPG193112* D.O.E: *13 MAY 2020*
MSDS DATED:04/04/2016 ATTACHED TO SHIPMENT

7 1 EA 0 1 592413-450GM LOCTITE REAGENT 2

MFG.CERT. OF CONFORMANCE ATTACHED.
BATCH: _____ D.O.E: _____
MSDS DATED: 03/03/2015 ATTACHED TO SHIPMENT

11 1 EA 1 ✓ 0 104-TITR-SOL-1L HENKEL ST TITRATING SOLUTN 104
0.1 N SDIUM THIOSLFTE (592416)

MFG.CERT. OF CONFORMANCE ATTACHED.

WT: PB 64719837 EXP: 17 MAY 2017

8/6/12-12

ORDER	RETURNS
<input type="checkbox"/> COMPLETE <input checked="" type="checkbox"/> PARTIAL	Not all goods are returnable. No returned goods without prior authorization and acceptance are subject to inspection. Restocking charges may apply.

Number of Packages & Signature

Pulled _____ Checked _____ Packed _____

www.ebpltd.com

REV.-15-01/22/16

PACKING LIST

A **KRAYDEN** CompanySOLD TO:
COD BY CHEQUE

ORDER DATE

SHIP DATE

CUSTOMER PO

12/06/16

12/07/16

PO34548

VANCOUVER OFFICE

TORONTO OFFICE

CALGARY WAREHOUSE

Unit 130 6651 Elmbridge Way
Richmond, BC V7C 5C2
Phone: (604) 279-9907
Fax: (604) 279-9914
Toll Free: 1-800-663-3271Unit 12 & 13 - 2430 Lucknow Dr.
Mississauga, Ontario L5S 1V3
Toll Free: 1-800-663-32714542 - 14TH Street NE
Calgary, AB, T2E 6T7
Toll Free: 1-800-663-3271AS9120/ISO9001
VANCOUVER
TORONTO

SHIP TO:

DART AEROSPACE
1270 ABERDEEN STREET
ATTN TO: GARY
HAWKESBURY, ON
K6A 1K7

CUSTOMER	OUR REF.#	COUNT	ORDERED BY	REV	TERMS
1CHEQTO	T26098	0	CHANTAL	Y	DUE ON RECEIPT

CUSTOMER GST #	P.S.T. LIC #	SHIPPED VIA
		PUROLATOR 7684382

SHIPPING CHARGES: PREPAID PPD & CHARGED COLLECT

ORDER QTY	UOM	SHIP	B/O	STOCK CODE	DESCRIPTION	UNIT PRICE	PER	EXT

BATCH: _____ D.O.E: _____

MSDS DATED:07/06/2015 ATTACHED TO SHIPMENT

THANK YOU FOR PAYING BY CREDIT CARD-PAID

SHIP PARTIAL

JC/RD

80/0-12/12

ORDER	RETURNS
<input type="checkbox"/> COMPLETE <input type="checkbox"/> PARTIAL	Not all goods are returnable. No returned goods without prior authorization and acceptance are subject to inspection. Restocking charges may apply.

Number of Packages & Signature

Pulled _____ Checked _____ Packed _____



Certificate of Analysis

Henkel Corporation
2515 Meadowpine Blvd
Mississauga, Ontario L5N 6C3

DATE 24/November/2016
PAGE 1 from 1

Attention of:
EB Peerless Ltd
A Krayden Company
(ATA-Aerospace-USD)
2430 Lucknow Dr Unit 12 & 13
Mississauga ON L5S 1V3

YOUR ORDER: TP7071
DATE OF ORDER: 15/November/2016
DELIVERY NOTE: 87328594
DELIVERY POSITION: 900001
CUSTOMER NO: 1563372

Contact Person: Nicole Masters
Phone: (905) 814-6511 Ext. 4672.
Fax: (905) 814-5391

Material: BONDERITE M-CR 1200S AERO
CHROMATE COATING 5GAL
Known as: ALODINE 1200S
Material-No: 593964
Batch no: PB61931121
Quantity: 1.000 PLS
Expiration date: 1460 Days from the Production Date
Production date: 14/May/2016

Specification	Analysis	Specification	Dimens.
pH value	1.50	1.30 - 1.60	
TOTAL CHROME	6.20	6.00 - 7.00	ml
Appearance MULTI-COLORED TAN TO ORANGE POWDER	OK	-	-

The above data represent the results of our quality assessment. They do not free the purchaser from his own quality check nor do they confirm that the product has certain properties or is suitable for a specific application.

(This certificate is created by an electronic system and is valid without a signature).



Certificate of Analysis

Henkel Corporation
2515 Meadowpine Blvd
Mississauga, Ontario L5N 6C3

DATE
PAGE

06/December/2016
1 from 1

Attention of:
EB Peerless Ltd
A Krayden Company
(ATA-Aerospace-USD)
2430 Lucknow Dr Unit 12 & 13
Mississauga ON L5S 1V3

YOUR ORDER: TP7096
DATE OF ORDER: 25/November/2016
DELIVERY NOTE: 87339005
DELIVERY POSITION: 900003
CUSTOMER NO: 1563372

Contact Person: Nicole Masters
Phone: (905) 814-6511 Ext. 4672.
Fax: (905) 814-5391

Material: TITRATING SOLUTION 104
Known as: TITRATING SOLUTION 104 (1L)
Material-No: 592416
Batch no: PB64719837
Quantity: 2.000 EA
Expiration date: 180 Days from the Production Date
Production date: 18/November/2016

Specification	Analysis	Specification	Dimens.
Appearance TRANSPARENT COLORLESS LIQUID	OK		

The above data represent the results of our quality assessment. They do not free the purchaser from his own quality check nor do they confirm that the product has certain properties or is suitable for a specific application.

(This certificate is created by an electronic system and is valid without a signature).



Certificate of Conformance

DATE 06 December 2016
PAGE 1 of 1

YOUR ORDER: TP7096
DATE OF ORDER: 11/25/2016
DELIVERY NOTE: 87339005
QUANTITY SHIPPED: 2 EA
DELIVERY POSITION: 900003
CUSTOMER NO: 1563372

Attention of:
EB Peerless Ltd
A Krayden Company
(ATA-Aerospace-USD)
2430 Lucknow Dr Unit 12 & 13
Mississauga ON L5S 1V3

Material: TITRATING SOLUTION 104
Known as: TITRATING SOLUTION 104 (1L)
Material-No: 592416
Item number: 592416
Batch no: PB64719837
Manufacture date: 11/2016
Use by: 05/2017
Storage Conditions:

It is hereby certified that, at the time of manufacture, all materials herewith furnished were tested to the appropriate specification requirements - Loctite, military and/or customer.

The data contained herein are furnished for information only and are believed to be reliable. We cannot assume responsibility for the results obtained by others over whose methods we have no control. It is the user's responsibility to determine suitability for the user's purpose of any production methods mentioned herein and to adopt such precautions as may be advisable for the protection of property and of persons against any hazards that may be involved in the handling and use thereof. In light of the foregoing, Henkel Corporation specifically disclaims all warranties expressed or implied, including warranties of merchantability or fitness for a particular purpose, arising from sale or use of Henkel Corporation's products. Henkel Corporation specifically disclaims any liability for consequential or incidental damages of any kind, including lost profits. The discussion herein of various processes or compositions is not to be interpreted as representation that they are free from domination of patents owned by others or as a license under any Henkel Corporation patents that may cover such processes or compositions. We recommend that each prospective user test his proposed application before repetitive use, using this data as a guide. This product may be covered by one or more United States or foreign patents or patent applications.

*** This certificate was electronically generated based upon Henkel internal controls and does not include a signature. ***



DANGEROUS GOODS DECLARATION
FOR FULLY REGULATED GROUND SHIPMENTS

DÉCLARATION DE L'EXPÉDITEUR POUR ENVOIS
PLEINEMENT RÉGLEMENTÉS EXPÉDIÉS PAR VOIE TERRESTRE

Date: 12 07 2016	MO DY/JR YR/AN	Waybill Number/ Numéro de connaissance: 330 918 219 685	
Consignor/ Expéditeur: Romeo Dajao	Consignee/ Consignataire: GARY DART AEROSPACE 1270 ABERDEEN ST		
Address/ Adresse: 2430 LUCKNOW DR #12	Address/ Adresse:		
City/ Ville: MISSISSAUGA	Prov: ON	City/ Ville: HAWKESBURY	Prov: ON
Postal Code/ Code Postal: L5S 1V3	Postal Code/ Code Postal: K6A 1K7		
Téléphone: 1 (905) 362-1151	Téléphone: 1 (613) 632-9577		

DESCRIPTION OF DANGEROUS GOODS / DESCRIPTION DES MARCHANDISES DANGEREUSES

UN Number Numéro UN	Proper Shipping Name Appellation Réglementaire	Primary Class Classe primaire	Sub Class "(In Brackets)" Classe Subsidiare <<(Parentheses)>>	Packing Group Groupe D'emballage	# of Pkgs # de Colis	Volume/Weight Volume/Poids
UN1463	CHROMIUM TRIOXIDE, ANHYDROUS	5.1	(6.1, 8)	II	1	32.3 KG

PLACARDS REQUIRED? PLACARDS REQUIS:

NO/NON

YES/OUI

CLASS/CLASSE X 4

24 HOUR NUMBER / NUMÉRO 24 HRS:

613-9976-6666

OTHER DETAILS/AUTRE DÉTAILS:

Certification Statement: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, are properly classified and packaged, have dangerous goods safety marks properly affixed or displayed on them, and are in all respects in proper condition for transport according to the Transportation of Dangerous Goods Regulations.

Déclaration d'attestation: Je déclare que le contenu de ce chargement est décrit ci-dessus de façon complète et exacte par l'appellation réglementaire adéquate et qu'il est convenablement classifié, emballé et muni d'indications de danger - marchandises dangereuses et à tous égards bien conditionné pour être transporté conformément au Règlement sur le transport des marchandises dangereuses.

SHIPPERS SIGNATURE / SIGNATURE DE L'EXPÉDITEUR:



Revision Number: 005.0

Issue date: 04/04/2016

1. PRODUCT AND COMPANY IDENTIFICATION

Product name: BONDERITE M-CR 1200S AERO **IDH number:** 593964
Product type: Conversion coating
Restriction of Use: None identified **Region:** United States
Company address:
 Henkel Corporation
 One Henkel Way
 Rocky Hill, Connecticut 06067 **Contact information:**
 Telephone: (860) 571-5100
 MEDICAL EMERGENCY Phone: Poison Control Center
 1-877-671-4608 (toll free) or 1-303-592-1711
 TRANSPORT EMERGENCY Phone: CHEMTREC
 1-800-424-9300 (toll free) or 1-703-527-3887
 Internet: www.henkelna.com

2. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

DANGER: MAY INTENSIFY FIRE; OXIDIZER.
 HARMFUL IF SWALLOWED.
 FATAL IN CONTACT WITH SKIN OR IF INHALED.
 CAUSES SEVERE SKIN BURNS AND EYE DAMAGE.
 MAY CAUSE AN ALLERGIC SKIN REACTION.
 MAY CAUSE CANCER.

HAZARD CLASS	HAZARD CATEGORY
OXIDIZING SOLID	2
ACUTE TOXICITY ORAL	4
ACUTE TOXICITY INHALATION	2
ACUTE TOXICITY DERMAL	2
SKIN CORROSION	1B
SERIOUS EYE DAMAGE	1
SKIN SENSITIZATION	1
CARCINOGENICITY	1A

PICTOGRAM(S)



Precautionary Statements

Prevention: Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Keep away from heat. Keep away from clothing and other combustible materials. Take any precaution to avoid mixing with combustibles. Do not breathe dust or fumes. Do not get in eyes, on skin, or on clothing. Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Use only outdoors or in a well-ventilated area. Contaminated work clothing should not be allowed out of the workplace. Wear protective gloves, eye protection, and face protection. Use personal protective equipment as required. [In case of inadequate ventilation] wear respiratory protection.

Response: If SWALLOWED: Immediately call poison control or physician if you feel unwell. IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. If on skin (or hair): Take off immediately all contaminated clothing. IF INHALED: Remove person to fresh air and keep comfortable for breathing. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. IF exposed or concerned: Get medical attention. Immediately call a poison control center or physician. If skin irritation or rash occurs: Get medical attention. Wash contaminated clothing before reuse. In case of fire: Use foam, dry chemical or carbon dioxide to extinguish.

Storage: Store in a well-ventilated place. Keep container tightly closed. Store locked up.

Disposal: Dispose of contents and/or container according to Federal, State/Provincial and local governmental regulations.

Classification complies with OSHA Hazard Communication Standard (29 CFR 1910.1200) and is consistent with the provisions of the United Nations Globally Harmonized System of Classification and Labeling of Chemicals (GHS).

See Section 11 for additional toxicological information.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Hazardous Component(s)	CAS Number	Percentage*
Chromium(VI) oxide	1333-82-0	30 - 60
Potassium tetrafluoroborate	14075-53-7	10 - 30
Tripotassium hexacyanoferrate	13746-66-2	10 - 30
Sodium fluoride	7681-49-4	5 - 10
Dipotassium hexafluorozirconate	16923-95-8	5 - 10

* Exact percentage is a trade secret. Concentration range is provided to assist users in providing appropriate protections.

4. FIRST AID MEASURES

Inhalation: If inhaled, immediately remove the affected person to fresh air. If symptoms develop and persist, get medical attention.

Skin contact: Remove contaminated clothing and footwear. For skin contact, flush with large amounts of water. Seek immediate medical attention. If irritation persists, repeat flushing and get medical attention. Discard any shoes or clothing items that cannot be decontaminated.

Eye contact: In case of contact with the eyes, rinse immediately with plenty of water for 15 minutes, and seek immediate medical attention.

Ingestion: Get immediate medical attention. Do not induce vomiting. Give one to two glasses of water or milk. Never give anything by mouth to a victim who is unconscious or is having convulsions.

Symptoms: See Section 11.

Notes to physician: Ocular exposure to corrosive fluoride compounds has been treated with isotonic sodium chloride or magnesium chloride. Dermal exposure to corrosive fluoride compounds has been treated with calcium gluconate or calcium carbonate gel applied topically to the affected areas to relieve pain at the site of exposure. Treatment of hypocalcemia associated with corrosive fluoride compounds exposure may be corrected by intravenous calcium gluconate or calcium chloride. Treatment of hypomagnesemia may be corrected by intravenous magnesium sulfate.

5. FIRE FIGHTING MEASURES

Extinguishing media: Use media appropriate for surrounding material.

Special firefighting procedures:

Wear full protective clothing. Wear self-contained breathing apparatus.

Unusual fire or explosion hazards:

Oxidizing agent, may cause spontaneous ignition of combustible materials. Under fire conditions, decomposing material may form a hot, viscous foam. Violent reactions may occur with organic materials or reducing agents. Empty containers retain product residue, so obey hazard warnings and handle empty containers as if they were full.

Hazardous combustion products:

Irritating and toxic gases or fumes may be released during a fire.

6. ACCIDENTAL RELEASE MEASURES

Use personal protection recommended in Section 8, isolate the hazard area and deny entry to unnecessary and unprotected personnel.

Environmental precautions:

Prevent further leakage or spillage if safe to do so. Wear appropriate protective equipment and clothing during clean-up.

Clean-up methods:

Spills should be cleaned immediately to prevent dispersion of airborne dusts. Do not allow product to enter sewer or waterways. Dispose of according to Federal, State and local governmental regulations.

7. HANDLING AND STORAGE

Handling:

Avoid contact with eyes, skin and clothing. Avoid breathing dust. Wash thoroughly after handling. For industrial use only.

Storage:

For safe storage, store between 5 °C (41°F) and 40 °C (104°F). Keep container tightly closed and in a cool, well-ventilated place away from incompatible materials. Store below 110 °F (43.3 °C).

For information on product shelf life, please review labels on container or check the Technical Data Sheet.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Employers should complete an assessment of all workplaces to determine the need for, and selection of, proper exposure controls and protective equipment for each task performed.

Hazardous Component(s)	ACGIH TLV	OSHA PEL	AIHA WEEL	OTHER
Chromium(VI) oxide	0.05 mg/m ³ TWA (as Cr)	0.005 mg/m ³ TWA 0.0025 mg/m ³ OSHA ACT 0.1 mg/m ³ Ceiling	None	None
Potassium tetrafluoroborate	6 mg/m ³ STEL Inhalable fraction. 2 mg/m ³ TWA Inhalable fraction.	None	None	None
Tripotassium hexacyanoferrate	None	None	None	None
Sodium fluoride	2.5 mg/m ³ TWA (as F)	2.5 mg/m ³ PEL (as F) 2.5 mg/m ³ TWA Dust.	None	None
Dipotassium hexafluorozirconate	5 mg/m ³ TWA (as Zr) 10 mg/m ³ STEL (as Zr) 2.5 mg/m ³ TWA (as F)	5 mg/m ³ PEL (as Zr) 2.5 mg/m ³ PEL (as F) 2.5 mg/m ³ TWA Dust.	None	None

Engineering controls:

Ventilation should effectively remove and prevent buildup of any dust generated from the handling of this product.

Respiratory protection: If ventilation is not sufficient to effectively prevent buildup of dust, appropriate NIOSH/MSHA respiratory protection must be provided.

Eye/face protection: Wear chemical goggles or a full face shield.

Skin protection: Chemical resistant, impermeable gloves. The use of butyl rubber gloves is recommended. Use of impervious apron and boots are recommended.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state:	Solid
Color:	orange
Odor:	Bland
Odor threshold:	Not available.
pH:	1.30 - 1.60
Vapor pressure:	Not determined
Boiling point/range:	Not applicable
Melting point/ range:	Not available.
Vapor density:	Not applicable
Flash point:	Not applicable
Flammable/Explosive limits - lower:	Not applicable
Flammable/Explosive limits - upper:	Not applicable
Autoignition temperature:	Not applicable
Flammability:	Not applicable
Evaporation rate:	Not applicable
Solubility in water:	Appreciable
Partition coefficient (n-octanol/water):	Not determined
VOC content:	Not applicable
Viscosity:	Not available.
Decomposition temperature:	Not available.

10. STABILITY AND REACTIVITY

Stability:	Stable at normal conditions.
Hazardous reactions:	Will not occur.
Hazardous decomposition products:	May liberate hydrogen fluoride.
Incompatible materials:	Avoid contact with organic materials, oils, greases, and any oxidizable materials. This product may react with strong alkalies.
Reactivity:	Not available.
Conditions to avoid:	Oxidizing agent, may cause spontaneous ignition of combustible materials.

11. TOXICOLOGICAL INFORMATION

Relevant routes of exposure: Skin, Inhalation, Eyes

Potential Health Effects/Symptoms

Inhalation: Mists, vapors or liquid may cause severe irritation or burns. Prolonged or repeated breathing may cause ulceration of nasal membranes.

Skin contact: Contact with broken skin may lead to formation of firmly marginated "chrome sores". Product contains chromium, which may cause an allergic skin sensitization reaction. Massive overexposures may lead to kidney failure and death. Following skin exposure to this product, the sensation of irritation or pain may be delayed.

Eye contact: This product is severely irritating to the eyes and may cause irreversible damage including burns and blindness.

Ingestion: This product may produce corrosive damage to the gastrointestinal tract if it is swallowed. Ingestion of small amounts of this product may result in potentially fatal hypocalcemia and systemic toxicity.

Hazardous Component(s)	LD50s and LC50s	Immediate and Delayed Health Effects
Chromium(VI) oxide	Oral LD50 (Rat) = 25 mg/kg Oral LD50 (Rat) = 29 mg/kg Oral LD50 (Rat) = 135 mg/kg Oral LD50 (Mouse) = 80 mg/kg Oral LD50 (Rat) = 80 mg/kg Dermal LD50 (Rabbit) = 30 mg/kg Inhalation LC50 (Rat, 4 h) = 0.087 mg/l Inhalation LC50 (Rat, 4 h) = 0.137 mg/l	Allergen, Blood, Central nervous system, Corrosive, Carcinogen, Developmental, Eyes, Gastrointestinal, Irritant, Kidney, Liver, Mutagen, Reproductive, Respiratory
Potassium tetrafluoroborate	None	Cardiac, Central nervous system, Developmental, Gastrointestinal, Irritant, Kidney, Metabolic, Reproductive
Tripotassium hexacyanoferrate	None	Cellular
Sodium fluoride	Oral LD50 (Mouse) = 44.3 mg/kg Oral LD50 (Mouse) = 46.0 mg/kg Oral LD50 (Rat) = 32.0 mg/kg Oral LD50 (Rat) = 51.6 mg/kg	Blood, Cardiac, Central nervous system, Corrosive, Gastrointestinal tract, Irritant, Kidney, Metabolic, Muscle, Teeth, Less weight gain and food intake.
Dipotassium hexafluorozirconate	Oral LD50 (Mouse) = 98 mg/kg	Allergen, Blood, Cardiac, Central nervous system, Corrosive, Gastrointestinal tract, Irritant, Kidney, Lung, Metabolic, Muscle, Teeth, Less weight gain and food intake.

Hazardous Component(s)	NTP Carcinogen	IARC Carcinogen	OSHA Carcinogen (Specifically Regulated)
Chromium(VI) oxide	Known To Be Human Carcinogen.	Group 1	Yes
Potassium tetrafluoroborate	No	No	No
Tripotassium hexacyanoferrate	No	No	No
Sodium fluoride	No	No	No
Dipotassium hexafluorozirconate	No	No	No

12. ECOLOGICAL INFORMATION

Ecological information:

Harmful to aquatic organisms.

13. DISPOSAL CONSIDERATIONS

Information provided is for unused product only.

Recommended method of disposal: Dispose of according to Federal, State and local governmental regulations.

Hazardous waste number: This product contains chromium which is a hazardous waste (D007). If discarded, this product is considered a RCRA ignitable waste, D001.

14. TRANSPORT INFORMATION

The transport information provided in this section only applies to the material/formulation itself, and is not specific to any package/configuration.

U.S. Department of Transportation Ground (49 CFR)

Proper shipping name: Chromium trioxide, anhydrous
Hazard class or division: 5.1 (6.1, 8)
Identification number: UN 1463
Packing group: II
DOT Hazardous Substance(s): Chromic acid, Sodium fluoride

International Air Transportation (ICAO/IATA)

Proper shipping name: Chromium trioxide, anhydrous
Hazard class or division: 5.1 (6.1, 8)
Identification number: UN 1463
Packing group: II

Water Transportation (IMO/IMDG)

Proper shipping name: CHROMIUM TRIOXIDE, ANHYDROUS
Hazard class or division: 5.1 (6.1, 8)
Identification number: UN 1463
Packing group: II
Marine pollutant: Chromium trioxide

15. REGULATORY INFORMATION

United States Regulatory Information

TSCA 8 (b) Inventory Status: All components are listed or are exempt from listing on the Toxic Substances Control Act Inventory.

TSCA 12 (b) Export Notification: Chromium(VI) oxide (CAS# 1333-82-0).

CERCLA/SARA Section 302 EHS: None above reporting de minimis.

CERCLA/SARA Section 311/312: Immediate Health, Delayed Health, Reactive

CERCLA/SARA Section 313: This product contains the following toxic chemicals subject to the reporting requirements of section 313 of the Emergency Planning and Community Right-To-Know Act of 1986 (40 CFR 372). Chromium(VI) oxide (CAS# 1333-82-0).

CERCLA Reportable quantity: Chromium(VI) oxide (CAS# 1333-82-0) 10 lbs. (4.54 kg)

Sodium fluoride (CAS# 7681-49-4) 1,000 lbs. (454 kg)

Dipotassium hexafluorozirconate (CAS# 16923-95-8) 1,000 lbs. (454 kg)

California Proposition 65: This product contains a chemical known in the State of California to cause cancer. This product contains a chemical known to the State of California to cause birth defects or other reproductive harm.

Canada Regulatory Information

CEPA DSL/NDSL Status: All components are listed on or are exempt from listing on the Canadian Domestic Substances List.

16. OTHER INFORMATION

This safety data sheet contains changes from the previous version in sections: New information added in Section(s): 14

Prepared by: Jennifer Mckay, Regulatory Affairs Specialist

Issue date: 04/04/2016

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Revision Number: 005.3

Issue date: 07/06/2015

1. PRODUCT AND COMPANY IDENTIFICATION

Product name: BONDERITE S-OT 104 known as
TITRATING SOLUTION 104 (1L)
IDH number: 592416

Product use: Auxiliary product
 Item number: 592416
 Region: Canada

Company address:
 Henkel Canada Corporation
 2515 Meadowpine Boulevard
 Mississauga, Ontario L5N 6C3
 Contact information:
 Telephone: 905.814.6511
 MEDICAL EMERGENCY Phone: Poison Control Center
 1-877-671-4608 (toll free) or 1-303-592-1711
 TRANSPORT EMERGENCY Phone: CHEMTREC
 1-800-424-9300 (toll free) or 1-703-527-3887
 Internet: www.henkelna.com

2. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

Physical state: Liquid
 WHMIS hazard class: D.2.B

Color: red

Odor: None

CAUTION: MAY CAUSE EYE, SKIN AND RESPIRATORY TRACT IRRITATION.

Relevant routes of exposure: Skin, Inhalation, Eyes

Potential Health Effects

Inhalation: This product may cause slight irritation to the respiratory system.
Skin contact: Prolonged or repeated skin contact may cause skin irritation or allergic skin sensitization reaction.
Eye contact: This product may cause irritation to the eyes.
Ingestion: No significant adverse effects are expected upon ingestion of the product.

Existing conditions aggravated by exposure: Eye, skin, and respiratory disorders.

See Section 11 for additional toxicological information.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Hazardous components	CAS NUMBER	%
Sodium thiosulphate	7772-98-7	1 - 5

4. FIRST AID MEASURES

Inhalation: If inhaled, immediately remove the affected person to fresh air. If symptoms develop and persist, get medical attention.

Skin contact: Immediately wash skin thoroughly with soap and water. If symptoms develop and persist, get medical attention.

Eye contact: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

Eye/face protection: Wear chemical goggles.

Skin protection: Chemical resistant, impermeable gloves. Use of impervious apron and boots are recommended.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state:	Liquid
Color:	red
Odor:	None
Odor threshold:	Not available.
pH:	7
Vapor pressure:	Not determined
Boiling point/range:	> 210 °F (> 98.9 °C)
Melting point/ range:	Not available.
Specific gravity:	1
Vapor density:	Not determined
Flash point:	Not applicable
Flammable/Explosive limits - lower:	Not applicable
Flammable/Explosive limits - upper:	Not applicable
Autoignition temperature:	Not applicable
Evaporation rate:	Not determined
Solubility in water:	Complete
Partition coefficient (n-octanol/water):	Not available.
VOC content:	Not applicable

10. STABILITY AND REACTIVITY

Stability:	Stable at normal conditions.
Hazardous reactions:	Will not occur.
Hazardous decomposition products:	Upon decomposition, this product emits carbon monoxide, carbon dioxide and/or low molecular weight hydrocarbons.
Incompatible materials:	This product may react with strong reducing agents. This product may react with strong oxidizing agents.
Conditions to avoid:	Store away from incompatible materials.

11. TOXICOLOGICAL INFORMATION

Toxicologically synergistic products:	Not available.
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Refer to the following for Irritancy of Product, Sensitization to Product, Carcinogenicity, Reproductive Toxicity, Teratogenicity, and Mutagenicity.

Hazardous components	NTP Carcinogen	IARC Carcinogen	OSHA Carcinogen (Specifically Regulated)	ACGIH Carcinogen
Sodium thiosulphate	No	No	No	No

Hazardous components	LD50s and LC50s	Health Effects/Target Organs
Sodium thiosulphate	None	No Target Organs

12. ECOLOGICAL INFORMATION

Ecological information:	Not available.
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13. DISPOSAL CONSIDERATIONS

Information provided is for unused product only.

Recommended method of disposal: Dispose of according to Federal, State and local governmental regulations.

14. TRANSPORT INFORMATION

Canada Transportation of Dangerous Goods - Ground

Proper shipping name:	Not regulated
Hazard class or division:	None
Identification number:	None
Packing group:	None

International Air Transportation (ICAO/IATA)

Proper shipping name:	Not regulated
Hazard class or division:	None
Identification number:	None
Packing group:	None

Water Transportation (IMO/IMDG)

Proper shipping name:	Not regulated
Hazard class or division:	None
Identification number:	None
Packing group:	None

15. REGULATORY INFORMATION

Canada Regulatory Information

CEPA DSL/NDSL Status: All components are listed on or are exempt from listing on the Canadian Domestic Substances List.

United States Regulatory Information

TSCA 8 (b) Inventory Status: All components are listed or are exempt from listing on the Toxic Substances Control Act Inventory.

16. OTHER INFORMATION

This material safety data sheet contains changes from the previous version in sections: Reviewed MSDS. Reissued with new date.

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulation (CPR), and the MSDS contains all the information required by the CPR.

Prepared by: Jennifer McKay, Regulatory Affairs Specialist

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Revision Number: 002.3

Issue date: 03/03/2015

1. PRODUCT AND COMPANY IDENTIFICATION

Product name:	REAGENT 2	IDH number:	592413
Product type:	Auxiliary product	Item number:	592413
Restriction of Use:	None identified	Region:	United States
Company address:		Contact information:	
Henkel Corporation One Henkel Way Rocky Hill, Connecticut 06067		Telephone: (860) 571-5100 MEDICAL EMERGENCY Phone: Poison Control Center 1-877-671-4608 (toll free) or 1-303-592-1711 TRANSPORT EMERGENCY Phone: CHEMTREC 1-800-424-9300 (toll free) or 1-703-527-3887 Internet: www.henkelna.com	

2. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

WARNING:	CAUSES SKIN IRRITATION. CAUSES SERIOUS EYE IRRITATION.
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HAZARD CLASS	HAZARD CATEGORY
SKIN IRRITATION	2
EYE IRRITATION	2A

PICTOGRAM(S)



Precautionary Statements

Prevention:	Wash thoroughly after handling. Wear eye and face protection. Wear protective gloves.
Response:	IF ON SKIN: Wash with plenty of soap and water. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to remove. Continue rinsing. If skin irritation occurs: Get medical attention. If eye irritation persists: Get medical attention. Take off contaminated clothing.
Storage:	Not prescribed
Disposal:	Not prescribed

Classification complies with OSHA Hazard Communication Standard (29 CFR 1910.1200) and is consistent with the provisions of the United Nations Globally Harmonized System of Classification and Labeling of Chemicals (GHS).

See Section 11 for additional toxicological information.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Hazardous Component(s)	CAS Number	Percentage*
K-iodide	7681-11-0	60 - 100

* Exact percentage is a trade secret. Concentration range is provided to assist users in providing appropriate protections.

4. FIRST AID MEASURES

Inhalation: If inhaled, immediately remove the affected person to fresh air. If symptoms develop and persist, get medical attention.

Skin contact: Immediately flush skin with plenty of water (using soap, if available). If symptoms develop and persist, get medical attention.

Eye contact: In case of contact with the eyes, rinse immediately with plenty of water for 15 minutes, and seek immediate medical attention.

Ingestion: Get immediate medical attention. Do not induce vomiting.

Symptoms: See Section 11.

Notes to physician: Treat symptomatically and supportively.

5. FIRE FIGHTING MEASURES

Extinguishing media: Use media appropriate for surrounding material.

Special firefighting procedures: Wear full protective clothing. Wear self-contained breathing apparatus.

Unusual fire or explosion hazards: Not a fire hazard.

Hazardous combustion products: Irritating and toxic gases or fumes may be released during a fire.

6. ACCIDENTAL RELEASE MEASURES

Use personal protection recommended in Section 8, isolate the hazard area and deny entry to unnecessary and unprotected personnel.

Environmental precautions: Wear a dust mask if dust is generated above exposure limits. Avoid breathing dust. Wear appropriate protective equipment and clothing during clean-up.

Clean-up methods: Sweep up or gather material and place in appropriate container for disposal. Dispose of according to Federal, State and local governmental regulations.

7. HANDLING AND STORAGE

Handling: For industrial use only. Avoid breathing dust. Avoid skin and eye contact. Wash thoroughly after handling.

Storage: Keep container tightly closed and in a cool, well-ventilated place away from incompatible materials.

For information on product shelf life, please review labels on container or check the Technical Data Sheet.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Employers should complete an assessment of all workplaces to determine the need for, and selection of, proper exposure controls and protective equipment for each task performed.

Hazardous Component(s)	ACGIH TLV	OSHA PEL	AIHA WEEL	OTHER
K-iodide	0.01 ppm TWA Inhalable fraction and vapor.	None	None	None

Engineering controls: Ventilation should effectively remove and prevent buildup of any dust generated from the handling of this product.

Respiratory protection:

When dusts or thermal processing fumes are generated and ventilation is not sufficient to effectively remove them, appropriate NIOSH/MSHA approved respiratory protection must be provided.

Eye/face protection:

Safety goggles or safety glasses with side shields.

Skin protection:

Wear impervious gloves for prolonged contact. Use of impervious apron and boots are recommended.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state:	Solid
Color:	White
Odor:	None
Odor threshold:	Not available.
pH:	Not available.
Vapor pressure:	Not applicable
Boiling point/range:	Not applicable
Melting point/ range:	Not applicable
Specific gravity:	Not applicable
Vapor density:	Not applicable
Flash point:	Not applicable
Flammable/Explosive limits - lower:	Not applicable
Flammable/Explosive limits - upper:	Not applicable
Autoignition temperature:	Not applicable
Evaporation rate:	Not applicable
Solubility in water:	Appreciable
Partition coefficient (n-octanol/water):	Not available.
VOC content:	Not applicable
Viscosity:	Not available.
Decomposition temperature:	Not available.

10. STABILITY AND REACTIVITY

Stability:	Stable at normal conditions.
Hazardous reactions:	None under normal processing.
Hazardous decomposition products:	Oxides of potassium, free or ionic iodine.
Incompatible materials:	This product may react with strong acids, bases and oxidizing agents.
Reactivity:	Not available.
Conditions to avoid:	Keep away from heat, ignition sources and incompatible materials.

11. TOXICOLOGICAL INFORMATION

Relevant routes of exposure: Skin, Inhalation, Eyes

Potential Health Effects/Symptoms

Inhalation: Dusts of this product may cause irritation of the nose, throat, and respiratory tract.
Skin contact: No skin irritation can be expected from single short-term exposure to this product. Prolonged or repeated contact may produce some irritation.
Eye contact: Dust or powder may irritate eye tissue.
Ingestion: May be harmful if swallowed.

Hazardous Component(s)	LD50s and LC50s	Immediate and Delayed Health Effects
K-iodide	None	Allergen, Developmental, Irritant, Sensory, Skin, Vascular

Hazardous Component(s)	NTP Carcinogen	IARC Carcinogen	OSHA Carcinogen (Specifically Regulated)
K-iodide	No	No	No

12. ECOLOGICAL INFORMATION

Ecological information: No data available.

13. DISPOSAL CONSIDERATIONS

Information provided is for unused product only.

Recommended method of disposal: Dispose of according to Federal, State and local governmental regulations.

Hazardous waste number: Material, if discarded, is not expected to be a characteristic hazardous waste under RCRA. Wastes must be tested using methods described in 40 CFR Part 261 to determine if it meets applicable definitions of hazardous wastes.

14. TRANSPORT INFORMATION

The transport information provided in this section only applies to the material/formulation itself, and is not specific to any package/configuration.

U.S. Department of Transportation Ground (49 CFR)

Proper shipping name: Not regulated
Hazard class or division: None
Identification number: None
Packing group: None

International Air Transportation (ICAO/IATA)

Proper shipping name: Not regulated
Hazard class or division: None
Identification number: None
Packing group: None

Water Transportation (IMO/IMDG)

Proper shipping name: Not regulated
Hazard class or division: None
Identification number: None
Packing group: None

15. REGULATORY INFORMATION**United States Regulatory Information**

TSCA 8 (b) Inventory Status: All components are listed or are exempt from listing on the Toxic Substances Control Act Inventory.

TSCA 12 (b) Export Notification: None above reporting de minimis

CERCLA/SARA Section 302 EHS: None above reporting de minimis
CERCLA/SARA Section 311/312: Immediate Health
CERCLA/SARA Section 313: None above reporting de minimis

California Proposition 65: No California Proposition 65 listed chemicals are known to be present.

Canada Regulatory Information

CEPA DSL/NDSL Status: All components are listed on or are exempt from listing on the Canadian Domestic Substances List.

16. OTHER INFORMATION

This safety data sheet contains changes from the previous version in sections: Reviewed MSDS. Reissued with new date.

Prepared by: Jennifer Mckay, Regulatory Affairs Specialist

Issue date: 03/03/2015

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